State of Utah

Department of Natural Resources

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas & Mining

JOHN R. BAZA
Division Director

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

November 7, 2006

CERTIFIED RETURN RECEIPT
7004 2510 0004 1824 4226

Intrepid Potash – Wendover, LLC
Rick York
2½ Miles East Frontage Road
Wendover, Utah 84083

Subject: Initial Review of Notice of Intention to Amend Large Mining Operations, Intrepid Potash, Intrepid Potash – Wendover, LLC Potash Mine, M/045/002, Tooele County, Utah

Dear Mr. York:

The Division has completed the review of your draft Notice of Intention to Commence Large Mining Operations for the Intrepid Potash – Wendover, LLC Potash Mine, located in Tooele County, Utah, received June 30, 2006. After reviewing the information, the Division has determined that the notice meets the qualifications to be considered an amendment, rather than a revision. The attached comments will need to be addressed before tentative approval may be granted.

The comments are listed under the applicable Minerals Rule heading; please format your response in a similar fashion and **address only those items requested in the attached technical review** by sending replacement pages of the original mining notice **using redline and strikeout text**. After the notice is determined technically complete, we will ask that you send us two clean copies of the complete and corrected plan. Upon final approval one copy stamped "approved" will be returned for your records. Please provide a response to this review by December 13, 2006 and refer to permit number M450002.

If you have any questions in this regard please contact me (801)538-5258, or Doug Jensen of the Minerals Staff. Thank you for your cooperation in completing this permitting action.

Sincerely,

Susan M. White

Susan White
Permit Supervisor
Minerals Regulatory Program

SMW:dj:pb
Attachment: Review
cc: Stan Perkes, BLM, State Officer
Will Stokes, SITLA
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REVIEW OF NOTICE OF INTENTION TO COMMENCE LARGE MINING OPERATIONS

Intrepid Potash – Wendover, LLC
Intrepid Potash – Wendover, LLC Potash Mine

M/045/002
November 7, 2006

R647-4-104 - Operator's, Surface and Mineral Ownership

R647-4-105 - Maps, Drawings & Photographs

105.2 Surface facilities map
Drawing 4.3 indicates that there is a proposed expansion to the #2 Harvest Pond.
The plan does not include any discussion of this expansion. Please include this additional feature in the plan. (DJ)

Drawing 6.1 shows a future conveyor belt running between the flotation mill and the dryer kiln.
Either it should be included in this plan along with sufficient surety for the removal upon final closure or remove it from the drawing.

Drawing 6.1 shows multiple transformers located on the site.
Have these items been tested to see that they are PCB free and labeled. If not, testing of these transformers will need to be included in the surety. And a contingency added to the surety for the special handling of this material.

Drawing 6.1 shows a fueling station that is purported to contain tanks and pumps.
For surety calculation purposes please show the number of tanks and pumps located in this area (DJ)

Drawings 6.9 & 6.10 show the current brine collection ditches, the status of the ditch in the southeast corner of pond 5 does not agree.
Please review these drawings and make the appropriate changes to have the disposition of the ditches in this area agree. (DJ)

Please provide a map that clearly outlines (and labels) the acreage disturbed or proposed to be disturbed by mining operations. The acreage should reflect the area included in the reclamation surety.

R647-4-106 - Operation Plan

106.3 Please provide the total estimated acreage and the acreage disturbed and reclaimed, annually.

The plan and maps indicate that additional ditches will be restored or constructed in the next five years of operation.
Reclamation of these additional features should be included the surety or remove them from the plan. (DJ)

The text of the plan indicates that there are six deep brine wells that are currently out of service but not abandoned. The Field Support Report indicates that there are seven wells with pumps and 11 without pumps to be abandoned.
Please correct this inconsistency in the plan. (DJ)

The wells listed in this field report do not match the wells shown on the out of service list. There are wells listed on the report that are not listed in the text of the plan.
Please correct the inconsistencies between the plan and the field report. (DJ)

The plan states that no new wells are planned for the site but should any new or reactivated wells be considered, appropriate documentation will be furnished to the BLM. This information should also be furnished to the Division. Any changes to the operations as documented in this plan will constitute an amendment to this plan, requiring approval prior to implementation. (DJ)

106.5 Existing soil types, location, amount
Drawing 2.1 shows phreatopytic and/or xerophytic vegetation communities in the northwest parts of the mine area, but because of the scale of this map, it is difficult to determine whether these communities once extended into the area now disturbed by the mine. If revegetation of some areas is feasible, the Division would like to see this work done, but certain soils information is needed for making a determination whether revegetation efforts are likely to succeed. Please provide drawing 2.1 at a scale in which revegetation success can be determined. (PBB)

Please provide information about the salt content (electrical conductivity) of soils in the area of the processing plant. The Division expects about 5-10 samples taken from a few inches below the surface in areas with the least salt influence should provide enough information. (PBB)

106.7 Existing vegetation - species and amount
Please check the legend of Drawing 2.1. It appears the designations for xerophytic and phreatophytic growth are switched. (PBB)

The plan contains general information about vegetation communities, but the need for detailed cover information is largely dependent on the feasibility of attempting to revegetate portions of the mine site. This will be evaluated once the Division receives a response to the comment under Section 106.5 above. (PBB)

R647-4-107 - Operation Practices

107.1 Public safety & welfare

107.1.13 Plugging or capping drill holes
Section 7.7 of the plan states that a Health and Safety Plan will be prepared and remain onsite during drilling activities.
Please explain what drilling activities will take place during reclamation. (DJ)

R647-4-109 - Impact Assessment

109.1 Impacts to surface & groundwater systems
The plan does not have enough data to assess the impacts on the hydrology of the area. There are no conclusive and complete data sets in the plan that can support the Hydraulic conductivity and how hydraulic conductivity can change so dramatically in 500 feet as shown in Table 3.12, Estimated Range of Groundwater Velocities. Please provide complete data sets to support the rates of movement of water to the collection ditches and evaluate impacts to the groundwater hydrology, including the Bonneville Salt Flats. (TM)

R647-4-110 - Reclamation Plan

110.2 Roads, highwalls, slopes, drainages, pits, etc., reclaimed
It is difficult for the reviewer to see the purpose of smoothing of the berms.
The text infers that the smoothing with a dozer and disc harrow will allow for this material to be more easily eroded thereby accelerate the filling of the ditches.
The majority of the material in these berms is playa material that is not easily eroded.
The Division feels that smoothing of these features will do little to reduce visual impacts and will do little to enhance the filling of the ditches. Please remove this from the plan and commit to filling the ditches. (DJ)

The plan indicates that all operator owned OHE lines running throughout the ponding system and plant would be removed.
Please document on the reclamation maps, which of the OHE lines are operator owned and are to be removed. (DJ)

The plan states that culverts will be removed during the reclamation of the site.
Please show the size and location of the culverts to be removed for surety calculation purposes. (DJ)

The plan indicates that a borrow pit and seal ditch was made outside the Pond 5 pond.
The plan should include a contingency for the reclamation of these features and the surety adjusted to reflect this activity. (DJ)

The plan indicates that the rail spur into the site will be removed.
Please show on the maps the portions of the rail spur to be removed. (DJ)

The plan includes language about a construction debris landfill.

Will this landfill be located onsite? If the site is to be built, the location should be shown on a map and the closure of this facility will need to be included in the surety? Before this landfill is built the Utah Division of Environmental Quality should be contacted to obtain any required permits for this facility. (DJ)

The plan states that two phenomena (salt encrustation & wind blown sand) are proposed to be used in some areas as a method of closure for brine ditches.
While these phenomena may have impacts on the ditches in some areas of the mine, it will not be an effective tool to reduce the spoils piles placed along the ditches. Please include in the plan a reclamation plan for all these features. (DJ)

The stated purpose of the benching of the brine ditches is to reduce the slope/depth hazard and to accelerate the natural slope reduction and smoothing over time.
The ditches are up to 40 feet wide and 15 to 25 feet deep. The amount of material placed in the ditches by cutting a bench 15 feet wide and 3 feet deep will do little to reduce the depth of these features. Please commit to pushing the spoils piles, located adjacent to the ditches, into these ditches. (DJ)

The conceptual restoration portion of the plan indicates that all ditches and berms on the property will be reclaimed to return to an approved post mining land use one of which is recreation.
The plan indicates only a limited amount of reclamation to a small percentage of the total ditches and berms located on the site. The text of the plan should be changed to reflect the text of the conceptual restoration plan. (DJ)

The submittal states that debris will be staged at a central location, cut into lengths necessary for transportation and recycled or sent for disposal in the local landfill.
The surety should contain a line item for the equipment, time and personnel required to complete the segregation process at this site. Trucking of this recycled material should also be added. (DJ)

The plan states that any material that can be put through the crusher will be processed and placed in the area of the south storage building.
A line item was placed in the surety for crushing of this material, but there is no contingency for moving the material to the crusher location and placing it in the south storage building. Please include a cost for this activity. (DJ)

The plan states that the demolition of the larger multi-story structures in the plant area is scoped in the Construction Demolition Debris Costing detail.
The Costing Detail does not identify which of the buildings in the plant area are considered to be multi-story. Please identify these buildings on this detail sheet. (DJ)

The plan is confusing in respect to the demolition of the buildings. The plan is to remove the buildings to ground surface and remaining sub-grade slabs and footing to be covered with native materials.

The plan is not specific on the disposition of the on grade slabs and footings. Please clarify in the plan what the demolition plan for these features will be. (DJ)

The plan for the disposal of the liners from the MgCl2 ponds differs in the submittal. In one area the liners are to be removed and in another the liners will be cut, folded to the bottom of the pond and buried.
Please review the submittal to insure that the plan is consistent. (DJ)

110.3 Description of facilities to be left (post mining use)
The plan indicates that one of the post mining land uses of the area will be recreation Leaving features like the brine collection ditches will create a public safety issue for this post mine land use. The Division requests the closure of these features to facilitate this post mine land use. (DJ)

110.4 Description or treatment/disposition of deleterious or acid forming material
The plan indicates that all ACBMs, PCBs and other hazardous material located on the site will be handled as per regulatory requirements.
If there are known hazardous materials located on the site that will require special handling, a line item should be included in the surety for that contingency. (DJ)

110.5 Revegetation planting program
The plan says revegetation is not planned as part of the reclamation plan because vegetation does not naturally occur in the area and the inability of the salt flat system to support natural vegetative growth. As stated in Section 106.5 of this review, the Division would like to see soils data before agreeing that revegetation should not be attempted on certain parts of the site. (PBB)

Iodine bush occurs in certain parts of the area, particularly, it appears, in protected areas where sand has drifted. Is it possible to propagate iodine bush and to establish it in areas on the east side of the site where sand accumulates? (PBB)

The tamarisk that grows along some of the ditches is not a desirable plant, but there is a biological control agent, the Chinese leaf beetle, that has proven very effective in controlling tamarisk. The Division suggests contacting the Utah State University Extension Service about obtaining and releasing beetles on the tamarisk. (PBB)

R647-4-111 - Reclamation Practices

111.1 Public safety & welfare
The plan only shows a limited amount of the 116.97(Page 84) or 120 miles(page 116) of brine ditches to receive any type of reclamation treatments.
All spoil piles which border the brine ditches should be pushed into the ditch openings which will allow for greater public safety. Because of the size of these features, they will

be hazards to public safety for many years after the closure of the facility. The Division only currently supports pushing the spoils material into all the ditches to eliminate these hazards. Please make the appropriate change to the plan to reflect this reclamation treatment. (DJ)

An overall hydrologic assessment of the surface and ground water impact to the surrounding hydrologic environment, mainly the salt flats or surrounding ground water aquifers needs to be addressed. Stating that the mine voluntarily shipped 6.2 million tons of salt back to the salt flats, does not assess the mines overall impact on the salt flats. Because the mine is draining deep aquifers and shallow aquifers, it is appropriate that the plan address the long term impacts to these aquifers and the surrounding natural environment and how this will be determined.(TM)

1.11 Sealing shafts & tunnels
1.12 Disposal of trash & debris
1.13 Plugging drill holes

There are a few inconsistencies in the plan that needs to be clarified. The plan states on page 111 that there are 25 deep wells. It is stated that the one and only well that is operational is #14a and #14 as abandoned as shown on Drawing # 4.9. It is stated on page 98 that all wells will be grouted when abandoned. Please include the closure records in the plan for the other 23 deep wells as discussed on page 111.(TM)

The plan discusses brackish wells # 6,7,14,and 15 as not being used. If these wells are decommissioned please provide closure records for these wells.(TM)

There appears to be 15 monitoring wells that have been abandoned as well, please provide closure records.(TM)

R647-4-113 - Surety

The plan indicates that steel beams in the large product warehouses and multi-story structures will be temporarily shored and braced using large timbers and brackets. The beams will be cut using a torch, rigged with a 200 long choker chain and pulled down using a D-9 dozer.
There is no line item in the Plant Area Construction Demolition for all these additional demolition activities. Please include the additional labor, materials and equipment time to the surety calculation for the demolition of these buildings. (DJ)

This surety calculation uses a 980 loader to load the debris from the large product warehouses and several other buildings on the site.
A 980 loader was not included in the Field Support report, only a 950G loader. Please modify the cost detail to include costs for the 980 loader. (DJ)

The plan states that roadways within the plant site will be ripped and graded using a D-9 dozer.
The surety for the plant site should contain a line item for this activity. (DJ)

The Plant Area Construction Debris Costing Detail should contain a line item for the removal and disposal of the process equipment contained in the plant buildings. (DJ)

The Division presently uses the Data Quest Rental Rate Blue Book for figuring equipment costs for projects. The costs for the equipment used in this plan are as follows:

	Rental	Operating Cost	Total
Cat 330 BL	$115/hr	$55/hr	$170/hr
Thumb for Cat 330	$ 16/hr	$ 1.95/hr	$ 17.95/hr
Impact Breaker for 330	$ 17/hr	$3.55/hr	$ 20.55/hr
Cat 950G Loader	$ 59/hr	$28/hr	$ 87/hr
Cat 980G Loader	$ 95/hr	$51.10/hr	$146.10/hr
Water Truck	$65.65/hr	$28/hr	$ 93.65/hr
246B Skid Loader	$ 35/hr	$14.55/hr	$49.55/hr
D9R Dozer	$210/hr	$91.80/hr	$301.80/hr
Operator for equipment	$57.50/hr	(From RS Means 2006 Cost Data)	
Laborer	$42.65/hr	(RS Means Cost Data)	

The rental of the crusher to be used could not be priced out due to the fact that the size of the crusher was not shown.
Please submit the crusher size. Will there be belts associated with the crusher operation, if so specify size and number? (DJ)

A mob/demob cost should be included in surety for all equipment used during final reclamation. (DJ)

The Field Support Reports do not contain a quantification of the scope of the activities shown in each area of this reclamation plan. It is difficult to ascertain whether the equipment, labor time and material removed are sufficient. Please supply estimates of the scope of work contained in the Reports. (DJ)

The following items are noted deficiencies in the Field Support Reports (Pond & Ditches) (DJ)

The surety should contain line items in the estimate for the mobilization of the crews and equipment to each of the somewhat remote sites. In order to evaluate this cost, the distance to each work site should be noted.

The cost of the rental of the oxygen/acetylene torch and saw, and estimated quantity of oxygen & acetylene used should be included in reclamation areas where they will be used.

Mobilization Fees – Pond Area
A general grading entry is shown in this area, please explain what equipment is being used to do this grading and what areas will be graded.

The report shows material going to the landfill with a landfill fee of $35/ton. The Division presently uses a cost from Means of $50/ton for material going to landfills.

The total loads to the landfill from this area are shown as 150 trucks.
A count of the loads shown on the supports sheets show a total of 154 trucks. Please correct this total.

Abandoned Drag Line Hulk 4

The Division questions the allotment of only 12 hours labor time to cut up this hulk sufficiently to allow for the removal. Please review this estimate.

The text of the plan indicates that there is a dozer hulk that is to be removed. The Field Support Report does not reflect the removal of this piece of equipment. If this piece of equipment exists please include the removal of the dozer in the surety.

Plant Area Construction Demolition Debris Costing Detail (DJ)

The mobilization line item in the field support report indicates the rental of a construction office.
Please indicate the size of this office trailer and what is the amount of time that this office will be needed. This information is needed to authenticate the amount shown.

The field support report shows a general grading cost.
Please show what equipment will be used to do this grading and the area to be graded.

The number of loads to the landfill is shown as 266 loads.
A count of these loads on the support reports totals 490 loads. Please correct this total.

The plan indicates that the steel beams will be shored and braced and the footings weakened by the 330 BL trackhoe with an impact breaker. The support beams will be rigged with a 200 foot choker and pulled down with a D9 dozer. None of these activities and materials are shown in the estimate.

Please amend the estimate to include these activities on all multi-story buildings at the site.
The field support for this area does not show the use of a D9 dozer.
Please add the cost of operating a dozer for this activity to this estimate.

The plan indicates that several overhead conveyors will be dismantled during final reclamation.
The use of a 50 ton rough terrain crane should be considered for the dismantling of these features.

On the Wash Pad Area the plan indicates that a laborer with a torch will be used to cut up the rails.
A laborer with a torch was not included in the estimate.

No 2 Diesel Tank & Pump. The plan indicates that the fuel tanks will be cleaned and removed by a certified tank cleaning company.
The estimate should include mobilization/demobilization of this company and the cost of the cleaning activity in the estimate. The additional cost of this additional activity should also be included with any of the tanks in the fuel storage areas within the site.

HDPE Delivery Pipelines. The plan states that the pipelines will cut up to be sold or disposed of in the landfill.
The estimate should include a laborer with a chainsaw to cut up the HDPE pipe.

Fueling Area w/tanks & pumps
It is difficult to quantify this estimate because no specific details on tank and pump numbers are shown on drawing 6.1. Please show the components that make up this area.
The disposition of the tanks & pumps is not clear in the plan.
The time allotted for clean-up of this area does not seem reasonable considering the amount of work that needs to be done in this area.
The piping in this area is to be cut up.
A laborer with a torch should be added to the workforce located at site.

Rail Spurs
It is difficult to verify time allotments for this reclamation without knowing the running footage of the rail to be removed.
Please show the detail of the rail removal on the plan drawings.

This report also alludes to the demolition of the Plant Office building.
The demolition of the Plant Office building and footers is shown on the

first support report in this section. Is this a duplication of the demolition? If not, where is this second building located?

The plan indicates that after plant demolition the roads within the site will be ripped and graded.
Please show the roads to be ripped on drawing 6.1 and include a line item in the surety calculation for this ripping and grading activity.

The reclamation of the MGCL2 ponds reflects only 1 hour each of a loader, skid loader, and trackhoe to close these ponds.
The plan states that the liners in these ponds will be either cut and folded into the bottom of the ponds or removed. The field support report does no allow enough labor time for this activity. If the liners are to be removed the loads of material to the landfill should be increased. None of the pieces of equipment assigned is capable of recontouring these features, the use of the D9 dozer should be considered. (DJ)

Brackish Well, Deep Brine Well and Monitor Wells (DJ)

The Support Report for the wells indicates 40 hours of general grading. Please note in the report what equipment will be used for this grading and the areas to be graded.

The waste disposal at the local landfill indicates 3 truckloads.
This portion of the reports shows 4 truckloads going to the landfill.
Please correct this oversight.

The costing for plugging the wells shows $3500/ well to close each well. The rental cost for a rig is $1000/hr with $110/hr operating cost. Considering this, it will allow the rig only about 3 hours to set-up and tear down plus the time involved to pull the pump and piping out of the hole. And running a pressurized tremie pipe to the bottom of the hole to allow for grout placement to close the hole. In addition to this there will also be mixing time for the grout. Will 3 hours be sufficient to perform these activities at each well site? Is the cost of the cement grout included in this estimate?
What is the depth of these wells and the size of the hole that is being plugged? These costs directly relate to the concrete cost for each hole closure.

DBW-21 shows $14,500 to close this well.
What is the depth and size of the well? Please show a calculation for the amount of cement grout needed to close this well.
Additional time should be allowed to pull the pump and piping from the hole before closure can begin.

Deep Brine Wells without pumps. The same question of hole size and depth also applies to the closure of these wells. Please show this information in the plan.
A laborer with a torch should be added to these well closures to facilitate the cutting off of the casing at ground level.